

**Department of Transportation  
Olympia, Washington 98504**

June 1, 2011

ATTENTION: All Bidders and Planholders

**I-90  
SNOWSHED TO KEECHELUS DAM PHASE 1C-  
REPLACE SNOWSHED AND ADD LANES  
10Y018  
STATE PROJECT**

**Addendum No. 6**

The Special Provisions, Plans, and Proposal for this project are amended as follows:

**Special Provisions**

1. In Addendum No. 3, Item 39 is revised to read as follows:

(\*\*\*\*\*)

Structural carbon steel contains the following approximate steel quantities:

<b>Bridge</b>	<b>Quantity</b>	
<b><u>Lake Keechelus Snowshed</u></b>		
Portal Headwall Roof	28,000	LB.
Pier 2 Platform	<u>7,193</u> [6,500]	LB.
Platform Grating	<u>186</u> [190]	S.F.
<u>VMS Hanger</u>	<u>9,512</u>	<u>LB.</u>
<u>Signal Light Hanger</u>	<u>543</u>	<u>LB.</u>
<u>Call Box</u>	<u>1,400</u>	<u>LB.</u>

2. In Addendum No. 1, Item No. 75 is revised to read as follows:

On Page 286, lines 44 [38] through 48 are deleted.

3. On Page 295, lines 25 through 28 are revised to read as follows:

Epoxy-Coated St. Reinf. Bar	<u>876,000</u> [875,000]	LB.
St. Reinf. Bar	<u>214,000</u> [208,000]	LB.
Conc. Class 4000D	<u>3,726</u> [3,658]	C.Y.
Conc. Class 4000	<u>1,267</u> [1,394]	C.Y.

4. On Page 295, line 33 is revised to read as follows:

Expansion Joint – RCS	<u>16,088</u> [17,498]	L.F.
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5. On Page 295, lines 37 through 49 are revised to read as follows:

**Pier 1 West Portal Tower**

St. Reinf. Bar	31,473	<del>28,127</del>	LB.
Conc. Class 4000 For Portal Tower	166	<del>1487</del>	C.Y.
Landing	46	<del>75</del>	S.F.
Ladder	47	<del>72</del>	L.F.
Structural <u>Low Alloy</u> <del>[High-Strength]</del> Steel	16,485	<del>14,234</del>	LB.
Roof Board	825	<del>840</del>	S.F.
Steel Roof Deck	825	<del>840</del>	S.F.
Preformed Metal Roofing	825	<del>840</del>	S.F.
Metal Sheeting	300	<del>235</del>	S.F.
Light Gage Structural Steel	296	<del>757</del>	LB.
Access Door		1	Each
<del>[Bird Control]</del>		<del>64</del>	<del>L.F.</del>

6. Page 295, line 51 through Page 296, line 11 is revised to read as follows:

**Pier 1 East Portal Tower**

St. Reinf. Bar	29,513	<del>25,709</del>	LB.
Conc. Class 4000 For Portal Tower	141	<del>1453</del>	C.Y.
Landing	28	<del>54</del>	S.F.
Ladder	26	<del>63</del>	L.F.
Structural <u>Low Alloy</u> <del>[High-Strength]</del> Steel	16,485	<del>14,234</del>	LB.
Roof Board	825	<del>840</del>	S.F.
Steel Roof Deck	825	<del>840</del>	S.F.
Preformed Metal Roofing	825	<del>840</del>	S.F.
Metal Sheeting	300	<del>235</del>	S.F.
Light Gage Structural Steel	296	<del>757</del>	LB.
Access Door		1	Each
<del>[Bird Control]</del>		<del>64</del>	<del>L.F.</del>

7. On Page 296, lines 13 through 27 are revised to read as follows:

**Pier 2 West Portal Tower**

St. Reinf. Bar	52,787	<del>42,250</del>	LB.
Conc. Class 4000 For Portal Tower		294	C.Y.
Structural <u>Low Alloy</u> <del>[High-Strength]</del> Steel	14,085	<del>10,645</del>	LB.
Stairs		212	S.F.
Handrail		160	L.F.
Motorized Lift Support Beam		1	Each
Motorized Lift		1	Each
Roof Board	950	<del>909</del>	S.F.
Steel Roof Deck	950	<del>909</del>	S.F.
Preformed Metal Roofing	950	<del>909</del>	S.F.
Metal Sheeting		194	S.F.
Light Gage Structural Steel	296	<del>757</del>	LB.
Door		3	Each
<del>[Bird Control]</del>		<del>64</del>	<del>L.F.</del>

8. On Page 296, lines 29 through 43 are revised to read as follows:

**Pier 2 East Portal Tower**

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St. Reinf. Bar	<u>47,575</u> <del>[37,750]</del>	LB.
Conc. Class 4000 For Portal Tower	262	C.Y.
Structural <u>Low Alloy</u> <del>[High Strength]</del> Steel	<u>14,085</u> <del>[10,645]</del>	LB.
Stairs	<u>165</u> <del>[185]</del>	S.F.
Handrail	180	L.F.
Motorized Lift Support Beam	1	Each
Motorized Lift	1	Each
Roof Board	<u>950</u> <del>[909]</del>	S.F.
Steel Roof Deck	<u>950</u> <del>[909]</del>	S.F.
Preformed Metal Roofing	<u>950</u> <del>[909]</del>	S.F.
Metal Sheetting	194	S.F.
Light Gage Structural Steel	<u>296</u> <del>[757]</del>	LB.
Door	3	Each
<del>[Bird Control]</del>	<del>64</del>	<del>L.F.]</del>

9. On Page 296, line 46 is revised to read as follows:

St. Reinf. Bar	<u>35,327</u> <del>[33,630]</del>	LB.
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10. On Page 297, lines 3, 4, and 10 are revised to read as follows:

St. Reinf. Bar	<u>277,512</u> <del>[104,000]</del>	LB.
Conc. Class 4000	<u>540</u> <del>[520]</del>	C.Y.
Door	<u>6</u> <del>[5]</del>	Each

11. On Page 297, the following is added after line 10:

Elastomeric Bearing Strip	75	L.F.
Compression Seal	71	L.F.

12. On Page 297, lines 13 and 14 are revised to read as follows:

St. Reinf. Bar	<u>327,421</u> <del>[104,000]</del>	LB.
Conc. Class 4000	<u>607</u> <del>[520]</del>	C.Y.

13. On Page 297, the following is added after line 20:

Elastomeric Bearing Strip	75	L.F.
Compression Seal	71	L.F.

14. On Page 297, lines 22 through 34 are revised to read as follows:

**Pier 1 West Communication Room**

St. Reinf. Bar	<u>16,843</u> <del>[12,834]</del>	LB.
Conc. Class 4000	<u>62</u> <del>[64]</del>	C.Y.
Structural Carbon Steel –		
Stairs, Landing, and Rails	<u>615</u> <del>[4,034]</del>	LB.
Door	1	Each

**Pier 1 East Communication Room**

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St. Reinf. Bar	<u>17,588</u> <del>[12,834]</del>	LB.
Conc. Class 4000	<u>62</u> <del>[64]</del>	C.Y.
Structural Carbon Steel –		
Stairs, Landing, and Rails	<u>615</u> <del>[4,034]</del>	LB.
Door		1 Each

15. On Page 297, lines 49 through 50 are revised to read as follows:

Wall Insulation, rigid, isocyanurate, foil faced, both sides, 4' x 8' sheet, 4" thick	S.F. <u>10,000</u> <del>[6,600]</del>
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16. On Page 298, lines 1 through 3 are revised to read as follows:

Metal stud partition, non-load bearing, galvanized, 12' high, 1-5/8" wide, 25 gauge, 24" O.C., includes top & bottom track	S.F. <u>10,000</u> <del>[6,600]</del>
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17. On Page 298, the following is added after line 47:

Enclosed Breakers, 30A	8 Each
Fused Disconnect, 30A	2 Each
Heat Trace Controller Cable & Wiring	1 Est.

18. On Page 299, line 21 is revised to read as follows:

Support / Generator Room Heaters EH1 THRU EH6 & <u>EH6A</u>	<u>7</u> <del>[6]</del> Each
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19. In Appendix A, on Page 1, the following is added after line 30:

098150	Resinous Wall System
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20. In Appendix A, on Page 68, the following is added after line 48:

## **SECTION 09 8150 – RESINOUS WALL SYSTEM**

### **Description**

This work consists of furnishing and installing a resinous wall system which consists of two-component epoxy primer, two-component epoxy saturant, a woven fiberglass engineering fabric, and a two-component, high performance, high solids epoxy glaze coating.

### **Materials**

The resinous wall system shall be one of the following or an approved equal:

Stonglaze VSD as manufactured by Stonhard, Inc

Series 114 H.B. Tneme-Tufcoat as manufactured by Tnemec, Inc

4685W POLY-COTE™ High Performance Wall Coating as manufactured by General Polymers

The colors shall be Federal Standard Color 595B 17925 or as selected by Engineer from manufacturer's standard colors.

### **Miscellaneous**

#### **Joint Sealant Material**

Joint sealing material shall be of a type produced by manufacturer of resinous wall system for type of service and joint condition indicated.

### **Construction Requirements**

#### **Design Requirements**

##### **Physical Properties**

The Contractor shall provide a resinous wall system that shall be a nominal 25 mils/635 microns thick system comprised of a two-component, epoxy saturant, a woven fiberglass engineering fabric and a two-component, high performance, high solids, epoxy glaze coating.

The Contractor shall provide wall system in which physical properties of topping when tested in accordance with standards or procedures referenced below, are as follows:

Percent Solids	92%
Hardness	80-85
(ASTM D 2240 / Shore D)	
Bond Strength	>400psi
(ASTM D 4541)	(100% concrete failure)
Impact Resistance	Exceeds 70 in. lbs.
(ASTM D 2794)	
Abrasion Resistance	0.08 gm max weight loss
(ASTM D 4060, Taber Abrader CS-17 wheel)	
Fire Resistance of Dry Film	Self Extinguishing
Heat Resistance Limitation	140°F
	(for continuous exposure)
	200°F
	(for intermittent spills)
Cure Rate	allow 24 hours for normal operations (at 77°F)
VOC	0.4 lbs/gal
(ASTM D 2364)	

#### **Submittals**

The Contractor shall submit manufacturer's technical data, written installation instructions, and chemical resistance data for the

elastomeric polymer lining including certification indicating compliance of materials with requirements.

The Contractor shall submit, for verification purposes, 4-inch square samples of each type of elastomeric polyurea lining required, applied to a rigid backing, in color and finish indicated.

### ***Substitutions***

The Contractor may submit substitutions requests to the Engineer based on the following:

- a. Document each request with complete data substantiating compliance of proposed substitution with the Plans and Special Provisions.
- b. A request constitutes a representation that the Contractor:
  - i. Shall coordinate installation and make changes to other work that may be required for the work to be complete with no additional cost to the Contracting Agency.
  - ii. Waives claims for additional costs or time extension that may subsequently become apparent.

The Contractor shall submit three copies of substitution request for consideration, one substitution per request.

The Contractor shall submit product data and certified test results attesting to the proposed product equivalence.

The Engineer will determine acceptability of proposed substitution and will notify the Contractor, in writing, of the decision to accept or reject request.

Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request.

NOTE: Whenever a product is specified by patent or proprietary name or by name of manufacturer, such specification establishes standard of quality in that particular field of manufacture.

### ***Quality Assurance***

The Contractor shall obtain primary lining materials including primers, resins, hardening agents, finish or sealing coats from a single manufacturer with not less than ten years of successful experience in manufacturing and installing principal materials described in this section. Contractor shall have completed at least five projects of similar size and complexity. All resinous flooring systems included in the Work shall be of the same manufacturer. The contractor shall

provide secondary materials only of type and from source recommended by manufacturer of primary materials.

### ***Field Quality Control***

The right is reserved to invoke the following material testing procedure at any time and any number of times during period of flooring application.

The State will engage service of an independent testing laboratory to sample materials being used on the job site. Samples of material will be taken, identified and sealed, and certified in presence of Contractor.

Testing laboratory will perform tests for any of characteristics specified, using applicable testing procedures referenced herein, or if none referenced, in manufacturer's product data.

If test results show materials being used do not comply with specified requirements, Contractor may be directed by State to stop work; remove non-complying materials; pay for testing; reapply flooring materials to properly prepared surfaces which had previously been coated with unacceptable materials.

### ***Delivery, Storage, and Handling***

Material shall be delivered to job site and checked by lining manufacturer for completeness and shipping damage prior to job start.

All materials used shall be factory pre-weighed and pre-packaged in single batches. No on site weighing or volumetric measurements allowed.

Material shall be stored in accordance with the manufactures written recommendations.

### ***Preparation***

Drywall shall be clean and free of bond inhibiting materials such as previously applied coatings. Preparation shall be by mechanical means and may include light sanding.

### ***Application***

The Contractor shall apply each component of resinous wall system in compliance with manufacturer's directions to produce a uniform monolithic wearing surface of thickness indicated, uninterrupted except at divider strips, sawn joints or other types of joints (if any), indicated or required.

The contractor shall mix and apply material according to manufacturer's recommended procedures.

The fiberglass engineering fabric shall be pre-cut and the Contractor shall apply the woven fiberglass engineering fabric according to manufacturer's recommended procedures.

The Contractor shall mix material according to manufacturer's recommended procedures. Please note that solvent reduction of any kind is strictly prohibited. The Contractor shall apply material using high quality rollers or an airless sprayer. Strict adherence to manufacturer's coverage rates is imperative.

### ***Curing, Protection and Clean Up***

The Contractor shall cure resinous wall materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of application and prior to completion of curing process. The Contractor shall close area of application for a minimum of 24 hours.

The Contractor shall protect resinous wall materials from damage and wear during construction operation. Where temporary covering is required for this purpose, the Contractor shall comply with manufacturer's recommendations for protective materials and method of application. The general contractor shall be responsible for protection and cleaning of surfaces after final coats.

The Contractor shall remove the temporary covering and clean the resinous wall system just prior to final inspection. The Contractor shall use cleaning materials and procedures recommended by resinous wall system manufacturer.

### ***Warranty***

Contractor shall furnish warranty in accordance with Standard Specifications Section 1-05.10.

## **Plans**

1. Plan sheets 12 through 14, 16 through 18, 20, 22, 40 through 43, 931, 932, 939, 1000, 1001, 1111, 1112, 1144, 1146, 1147, 1154, 1162 through 1164, 1172, 1192, 1209, 1235, 1236, 1247, 1257, 1271, 1320, and 1321 are revised as shaded, outlined and noted on the attached sheets.
2. Plan sheets 678, 963, 1002 through 1023, 1161, 1167 through 1171 and 1274 through 1276 are replaced with the attached sheets.
3. Plan sheets 1007A, 1007B, 1018A, 1127A through 1127C, 1144A, 1146A, 1161A, 1224A through 1224E and 1276A through 1276K are added to the Plans.
4. On plan sheets 279 and 280, the note “\* FOR ADDITIONAL REMOVING CONC. BARRIER QUANTITIES SEE PLAN SHEET SP4-3.1” IS DELETED AND

REPLACED WITH “\* FOR ADDITIONAL REMOVING CONC. BARRIER  
QUANTITIES SEE PLAN SHEET SP4-3”.

## **Proposal**

1. On Page 7: Item No.'s 85, 86 and 87, the PLAN QUANTITY is revised.
2. On Page 8: Item No.'s 93, 97 through 99 and 103, the PLAN QUANTITY is revised.
3. On Page 9: Item No.'s 104, 105, 107, 109, 110 and 117, the PLAN QUANTITY is revised.
4. On Page 12: Item No. 159, the PLAN QUANTITY is revised.
5. On Page 30:

The new item No. 396 has been added.

The ALTERNATE BID A1 and A2 ITEM No.'s have been revised.

6. On Page 31

The ALTERNATE BID A1 and A2 ITEM No.'s have been revised.

## **Project Cross-Sections**

The Project-Sections for this project have been updated and revised and are available for the bidders review through the WSDOT Projects page at:

<http://www.wsdot.wa.gov/Projects/I90/SnoqualmiePassEast/I90contractorinfo.htm>

Bidders are instructed to revise sheets 279 and 280 of the Plans as revised sheets have not been prepared for attachment to this addendum.

Bidders shall furnish the Secretary of Transportation with evidence of the receipt of this addendum. This addendum will be incorporated in the contract when awarded and when formally executed.

**Don Whitehouse, P.E.**  
**Regional Administrator**

### **Attachment:**

Sheets 12 through 14, 16 through 18, 20, 22, 40 through 43, 678, 931, 932, 939, 963, 1000 through 1007, 1007A, 1007B, 1008 through 1018, 1018A, 1019 through

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1023, 1111, 1112, 1127A through 1127C, 1144, 1144A, 1146, 1146A, 1147, 1154, 1161, 1161A, 1162 through 1164, 1167 through 1172, 1192, 1209, 1224A through 1224E, 1235, 1236, 1247, 1257, 1271, 1274 through 1276, 1276A through 1276K, 1320 and 1321 (REV. 5/25/11)

Pages 7 through 9, 12, 30 and 31 of the Proposal (REV. 5/25/11)

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